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## **Overview**

**1. What is a Patent ?**

**2. What is a Copyright ?**

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### 1. What is a Patent ?

A patent for an invention is granted by government to the inventor, giving the inventor the right for a limited period to stop others from making, using or selling the invention without the permission of the inventor. When a patent is granted, the invention becomes the property of the inventor, which –like any other form of property or business asset – can be bought, sold, rented or hired.

Patents are basically territorial rights.

A patent gives you the right to stop others from using your invention. Alternatively, you can choose to let others use it under agreed terms. A patent also brings the right to take legal action against others who might be infringing the invention and to claim damages. The mere existence of a patent may be enough to deter a potential infringer.

A patent empowers the owner of an invention to take legal action against others to prevent the unlicensed manufacture, use, importation or sale of the patented invention. This right can be used to give the proprietor breathing space to develop a business based on the invention, or another person or company may be allowed to exploit the invention and pay royalties under a licensing agreement.

#### 1.1 What kinds of things do patents cover ?

Patents are generally intended to cover products or processes that possess or contain new functional or technical aspects; patents are therefore concerned with, for example, how things work, what they do, how they do it, what they are made of or how they are made.

The vast majority of patents are for incremental improvements in known technology; it has been said that innovation is evolution rather than revolution.

### **1.2 What are the requirements for an invention to be patentable ?**

The invention has to:

- be new
- involve an inventive step
- be capable of industrial application
- not be „excluded“

#### **1.2.1 New**

An invention is new when it has never been made public before in any way and anywhere in the world before the date on which an application for a patent is filed.

#### **1.2.2 Inventive step**

An invention involves an inventive step if, when compared with what is already known it would not be obvious to someone skilled in the art.

#### **1.2.3 Capable of industrial application**

An invention also has to be capable of being made or used in some kind of industry or business services. This means that the invention has to be take the practical form of an apparatus or device, a product such as some new material or substance or an industrial process or method of operation.

„Industry“ is meant in its broadest sense as anything distinct from purely intellectual or aesthetic activity. It does not necessarily imply the use of a machine or the manufacture of an article.

Articles or processes alleged to operate in a manner clearly contrary to well-established physical laws.

### 1.2.4 Not be „excluded“

An invention is not patentable if it is:

- a discovery
- a scientific theory or mathematical method
- an aesthetic creation such as literary, dramatic or artistic work
- a scheme or method for performing a mental act, playing a game or doing business
- the presentation of information or a computer program

If the invention involves more than these abstract aspects so that it has physical features (such as a special apparatus to play a new game) then it may be patentable.

Generally excluded are inventions that are immoral. Such as letter bomb or the production of drinks and food that is lethal to human beings.

In addition, it is not possible to get a patent for an invention if it is a new animal variety or plant variety, a method of treatment of the human or animal body by surgery or therapy; or a method of diagnosis. Microbiological inventions however are patentable.

### 1.3 Software related inventions

A computer program per se is not patentable. Only technical inventions are patentable.

If a computer program is capable of bringing about, when running on a computer, a further technical effect going beyond these normal physical effects, it is not excluded from patentability, irrespective of whether it is claimed by itself or as a record on a carrier. This further technical effect may be known in the prior art.

A further technical effect which lends technical character to a computer program may

be found e.g. in the control of an industrial process or in processing data which represent physical entities or in the internal functioning of the computer itself or its interfaces under the influence of the program and could, for example, affect the efficiency or security of a process, the management of computer resources required or the rate of data transfer in a communication link.

If the program has the potential to bring about, when running on a computer, a further technical effect which goes beyond the normal physical interactions between the program and the computer a patent may be granted on such a claim if all the requirements of the EPC are met. Such claims should not contain program listings, but should define all the features which assure patentability of the process which the program is intended to carry out when it is run.

The requirement for technical character is satisfied if technical considerations are required to carry out the invention. Such technical considerations must be reflected in the claimed subject-matter.

### **Summary:**

A software related invention is technical , if

- a) a physical property is influenced
- b) a technical effect can be caused by the invention
- c) a technical scope is concerned
- d) technical reflections have been necessary

Why apply a software invention although computer programs are protected by copyright law ?

The copyright only protects the expression of software, not the solution principles it is based on. Furthermore it only includes copies of a protected work and not independent developments. A granted patent protects all conceivable programs for a solution, the copyright only protects one single program.

### **1.4 How long will a patent last ?**

A patent exists twenty years, starting with the day following the date the application is registered at the European Patent Office or a national Patent office.

### **1.5 How to apply for a patent**

If you are thinking of applying for a patent you should not publicly disclose the invention before you file an application because this could be counted as prior publication of your invention. Any type of disclosure (whether by word of mouth, demonstration, advertisement or article in a journal), by the applicant or anyone acting for them, could prevent the applicant from getting a patent. It could also be reason for having the patent revoked if one was obtained. It is essential that the applicant only makes any disclosure under conditions of strict confidence.

About the timing for an application there are no hard rules. Filing an application early in the research phase of an invention can be vital since it establishes a „priority“ for the applicant over anyone else who subsequently files an application for the same invention. However, if you file a patent early you might make changes to your invention, in which case you would have to re-file your application which is possible under restricted circumstances (within one year in principle). Moreover, there can often be important commercial reasons to delay filing until absolutely necessary, when the prototype of your invention is actually made and ready to be put on the market.

You would be well advised to employ the services of a patent attorney who will have the necessary technical and legal skills to prepare the application, but there is no obligation to do so.

1. First of all you need a registration form of the European or the national Patent Office. These form can be ordered free at the several Offices.
2. To apply your invention you have to pay an application fee.
3. The application has to be in writing

4. The application has to be in English, German or French at the European Patent Office respectively in the official language of the country you would like to apply. Translations can be handed in within three months and in some cases exceptions can or have to be made from this rule.

5. The documents of the application should include

- a. the registration form
- b. the description
- c. the drawings
- d. the claims
- e. an abstract

The description has to describe the invention comprehensively. The documents should contain all essential items of the invention. It is absolutely vital that you put all the necessary information about your invention in the description because you cannot make any changes once you have filed the application (except in re-filing within the one year priority period).

Within fifteen months after the application has been handed in the applicant has to designate the inventor and make sure, that no one else took part in the invention.

After the application is registered the documents pass on to preliminary examination. The application then will be analysed to cover obvious mistakes.

This procedure although classifies the invention to the IPC (International Patent Classification), so it is guaranteed that the invention will be checked by a examiner, who will have the necessary technical skills.

18 months after handing in the application your invention will be disclosed to the public. The Patent Office publishes a Disclosure publication that includes the description of the invention as it was handed in on the registered application day.

### 1.6 European Patent

As already mentioned a patent is just a territorial right.

Actually we do not have a Common European Patent as we have a Community Trade Mark.

But there is a possibility to cover an invention in several European countries at the same time by applying for a European Patent at the European Office in Munich. Profitable the procedure at the European Patent Office connects the different procedures in the named countries which means, that you need not to make an application in every single country. Nevertheless you will get a European Patent for several designated European countries instead of one. A Common opposition procedure is foreseen in the European Patent Convention.

### 1.7 Patent Cooperation Treaty

The Patent Cooperation treaty (PCT) on chapter 1 makes it possible to solve the priority date with one subsequent application for all joining states without needing corresponding translations. The joining states are not all existing countries in the world but the most importing industry countries (nowadays about 108 countries but not including Taiwan). There are several offices where you can hand in your PCT-application. Regularly the European Patent Office is used because it takes the novelty investigation, too. The coordination takes the World Intellectual Organisation (WIPO) in Geneva. By making a PCT-application the priority time is lengthened because the applicator has the time to take national necessary measures within twenty months.

On chapter 2 a preliminary international examination is made by the charged office. Thereby the time between first application day and national phases is thirty lengthened to thirty months.

Disadvantageously the PCT-application takes high fees. So if you are sure you can make the subsequent application before the priority time is expired a PCT-application



is hardly worthwhile. On the other hand: To pay the fee for the PCT-application is surely inexpensively than paying fees for applications in every single country.

### **2. What is a Copyright ?**

The copyright is an unregistered right. Copyright comes into effect immediately, as soon as something that can be protected is created and fixed in some way. This might be on paper, on film, via sound recording, as an electronic record on the internet, etc.

The type of works that copyright protects -regardless of the medium in which they exist and this includes the internet- are:

1. original literary works (novels, instruction manuals, computer programs, lyrics for songs, articles in newspapers, some types of databases, but no names or titles)
2. original dramatic works, including works of dance or mime
3. original music works
4. original artistic works (paintings, engravings, photographs, sculptures, collages, works of architecture, technical drawings, diagrams, maps, logos)
5. published editions of works (the typographical arrangement of a publication)
6. sound recordings, which may be recordings on many medium (tape, record, compact disc)
7. films and videos
8. broadcasts (including cable and satellite programs)

Ideas are not protected by copyright.

Copyright gives the creators of a wide range of material, such as literature, art, music, sound recordings, films and broadcasts, economic rights enabling them to control use of their material in a number of ways, such as making copies, issuing copies to the public, performing in public, broadcasting and use-online.

The purpose of copyright is to allow creators to gain economic rewards for their efforts and so encourage future creativity and the development of new material.

Copyright gives rights to the creators of certain kinds of material to control the various ways in which their material may be exploited. The rights broadly cover: copying, adapting, issuing, renting and lending copies to the public performing in public and broadcasting.

As a form of intellectual property copyright can be transferred to someone else. It can be bought and sold, inherited or otherwise transferred. A transfer of ownership may cover all or only some of the rights to which a copyright owner is entitled. First or subsequent copyright owners can choose to license others to use their works whilst retaining ownership themselves.

Copyright in a literary, dramatic, musical or artistic work lasts until 70 years after the death of the author. the duration of copyright in a film is 70 years after the death of the last to survive of the principal director, the authors of the screenplay and dialogue, and the composer of any music specially created for the film. Databases are protected 15 years after publishing or 15 years after finishing if it is not published during the 15 years. Photographs or products that are made like photographs are protected 50 years after publishing.

As far as computer programs are concerned the copyright law refers to the rules for the protection of original literary works. This arrangement is based on the European Guideline from 1991. So copyright only protects the expression of software, not the solution principles it is based on.

### **3. What is a Trade Mark ?**

A Trade Mark is any sign which can distinguish the goods and services of one trader from those of another. A sign including words, logos, pictures or a combination of those for example. The function of Trade Marks is to make a customer recognise the product of a particular trader and evoking a positive impression about the company, too.

If your trade mark is not registered you may seek redress through the courts under law in a passing off action. For this to succeed you must persuade the court, first that the mark used by someone else is associated in the public mind with your own product of service, and secondly that the other person's goods have been mistaken for your own.

To be registrable a trade mark has to be

1. distinctive for the goods or services for which the registration is sought
2. not deceptive
3. not contrary to law or morality
4. not identical or similar to any earlier marks for the same or similar goods or services.

#### **4. Software Patent**

#### **5. Examples**

## 6. Search Facilities

### 6.1 esp@cenet

The function of patents is to protect inventions. To do this, they must be published and made available to the public. However, not only do patents contain solutions to technical problems, they also represent an almost inexhaustible source of information. In fact, more than 80% of all the technical knowledge in the world can be found in patent literature.

To promote the utilisation of this information and to widen the existing channels for the dissemination of patent information, the European Patent Office got together in summer 1998 with the member states of the European Patent Organisation and the European Commission to launch a new service called esp@cenet, which is easily accessible via the Internet.

The main aim of this new service is to provide users with a readily accessible source of free patent information. It also aims to improve awareness at national and international level, in particular among small and medium-sized enterprises, of the kind of information that is accessible to the public. The fact that esp@cenet is designed primarily for the general public is no coincidence, as the needs of patent search professionals are already met by the large number of existing on-line services.

A search carried out in the esp@cenet database cannot replace a professional search. The information furnished is not exhaustive and this service cannot be considered as a complete and official source of patent information.

### 6.2 DEPATISnet

DEPATISnet is a service provided to you by the German Patent and Trade Mark Office. You can conduct online searches in patent publications from around the world stored in the database of DEPATIS, the in-house patent information system of the

GPTO. When a search has been performed, the result list will be displayed. Selecting retrieved documents from your result list leads to display of the bibliographic data (title, applicant, inventor...) of that document. The original document can also be displayed in PDF format. You can browse the displayed document backwards and forwards or you can jump directly to certain parts of documents (subdocuments) eg claims, drawing, description etc. Printing of the document page by page is also available. **This service is free of charge.**

Data are imported into DEPATIS in the original language (eg JP abstracts in English, title and abstracts of French documents in French). When searching documents of specific countries, search terms must be in the appropriate language (eg English for JP abstracts).

To meet the requirements of both casual searchers and professional users, DEPATISnet offers five different search modes:

### Beginner's search

The Beginner's mode is suitable for simple queries using provided search fields. You will find the search criteria in a search interface with input fields where you can type in your search terms. For correct input of search terms, please refer to the Help pages. In case you require information on terms used in the world of patents, please refer to the introduction on this subject.

### Expert search

The Expert mode assists you in creating complex queries. In this mode, you may use all defined search criteria in a free query input field and combine terms to form long and complex queries using Boolean Operators. The applied syntax follows MIMOSA syntax. Buttons are provided for convenient construction of advanced search queries.

### IKOFAX search

In this mode, experienced users can construct and run searches using IKOFAX syntax (internal query language of the GPTO). The IKOFAX mode allows to access data using the SEARCH command.

### Assisted search

In this mode you can draft plain-language queries. You can forward your request to one of the listed Patent Information Centres (PICs). You will get support from experts of the Patent Information Centres, which might be supplemented by chargeable services.

### Patent family search

This mode allows to ascertain documents related to a specific document (members of a patent family). You may initiate the search directly from the result list or from the family search mode.

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## 6.3 Delphion Search for US Granted Patents

<http://www.delphion.com>

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### 7. General Advice

You would be well advised to employ the services of a lawyer, patent attorney, investigator (...) who will have the necessary legal and technical skills to prepare the application, but there is no obligation to do so.

For extensive hints you can contact the following Offices or Bureaus that are specialised in intellectual property rights especially as far as software related inventions are concerned:

#### a. Offices

##### **European Patent Office (EPA)**

Erhardtstr. 27

D - 80298 München

☎ 0049 -(0)89 - 2399-0

FAX 0049 - (0)89 - 2399-4465

##### **German Patent and Trademark Office (DPMA)**

Zweibrückenstr. 12

D - 80297 München

☎ 0049 - (0)89 - 2195-0

FAX 0049 - (0)89 - 2196-2221

##### **World Intellectual Property Organisation (WIPO)**

34, Chemin des Colombettes

CH-1211 Geneva 20

☎ 0041-(0)22 - 3389 - 111

FAX 0041-(0)22 - 7401 - 1812

### **b. Bureaus**

Patent- und Rechtsanwälte

Kiani und Springorum

Heinrich-Heine-Allee 29

P.O. Box 24 01 53

D - 40090 Düsseldorf

☎ 0049 (0)211- 828427-0

FAX 0049 (0)211-828427-1